

Simon had hoped to be able to speak to you in person today but as some of you will know, he has mesothelioma, which is affecting his heart. As he normally responds to talks by getting stressed he thought it would be better not to deliver this one – he hope the alternative works.

I am the alternative...Helen Lynn from the alliance for cancer prevention

Simons argument today is that the HSE cannot be trusted to protect the workforce from occupational cancer and that **you** yourselves will play the key role in achieving this. Why ?

Because you've done it before.

You've done it before

40 years ago, when Simon first came to Sheffield to work on health and safety there was no white finger and very little deafness caused by work – true, the sound systems in cinemas had to be turned up higher in Sheffield, and a lot of older engineering workers had poor circulation in their fingers, but industrial deafness affected - according to the figures - a few dozen men a year and vibration induced white finger a few more.

By the end of the 1980s, people were talking about an epidemic of industrial disease in the older steel, mining, engineering and shipbuilding areas. What had changed ?

It was all about awareness.

In the early '80s tens of thousands lost their jobs in traditional manufacturing and tried to wring some compensation out of their past employers.

We trained up safety reps and stewards to carry out hearing tests and soon it became obvious that the typical hearing test seen in a case of noise-induced deafness were quite easy to detect.

Elsewhere people took the short cut to a solicitor – sometimes unfortunately, getting ripped off in the process.

Even the mining industry which had disputed the existence of miners' bronchitis and emphysema from the 1950s onwards was finally forced set up the bronchitis and emphysema scheme.

It's the scale of these changes of awareness which are so important.

Diseases which were denied or seen as rare throwbacks to past working conditions - suddenly had to be recognised in 100s of thousands of cases – in noise-induced deafness probably getting on for a million cases.

This is why Simon is deeply sceptical of the ability of HSE or the establishment generally to assess industrial disease in the population.

Ironically in 1974, just when the Health and Safety at Work Act came out, HSE never acquired the clout it would need to enforce on health grounds at the scale required. Its recent response to occupational cancer has been typical.

pause

So - How many of you are exposed to carcinogens or are at risk of cancer through your jobs ?

Show of hands?

Here is a list of some the main carcinogens - slide

Main groups of carcinogens at work

- Metals
 - Arsenic, beryllium, cadmium, chromium, cobalt, lead, nickel,
- Pesticides, herbicides, drugs
- Asbestos, silica, refractory ceramic fibres
- Radiation (solar, ionising, non-ionising)
- PAHs (also coal-tar pitch products)
 - Vehicle exhausts, mineral oils, tobacco smoke, combustion products, creosotes
- Solvents and *chlor* compounds
- Chlorination byproducts
- Various chemicals
 - Aromatic amines, benzene, formaldehyde, nitrosamines, PCBs, endocrine disruptors
- Shiftwork ('long-term night work')

These tables always look far from every day work till you look harder at them. If the byproducts of using chlorinated sterilising agents cause cancer – how widespread is that risk.

What about shift work ? – Very large numbers of people potentially affected.

Now - how many people think they are exposed carcinogens at work. Show of hands?

Pause - slide

How strong is the evidence ?

- There are three classes of carcinogens normally recognised by IARC – the international research organisation, based on the strength and nature of evidence that they cause cancer:
 - Group 1 where the evidence is strongest – sufficient to say that a factor causes cancer in humans,
 - Group 2A where it is strong enough to say that this substance probably causes cancer with strong evidence for cancer in animals but inadequate evidence in humans, and
 - Group 2B where the evidence is more limited for animals and not sufficient for humans.
- In practice substances start as Group 3 – unclassified and then become Group 2 before becoming Group 1 as evidence builds up. It is exceptional for a substance to fall in the rankings.

pause

slides:

What needs to be done ? – but the question should be – *what is HSE doing ?*

Waiting for us all to push up daisies or maybe watching them grow?

Its seems increasingly clear that HSE cannot be expected to meet these expectations.

We need to know **where** the carcinogens are at work

We need measures in place to **replace** them with **enforcement** to make sure this is being done.

For the currently exposed – we need to know how exposed they are and make sure that **surveillance** is done.

Compensation should be available to those who get cancer through their work

We need to be part of a process by which new substances are **classified and tracked** if they enter materials used at work (the purpose of REACH).

Pause

Who is going to do all this? In practice we can expect little of HSE.

In 2004 it set out its plans for tackling long latency diseases – diseases which normally happen with a delay after the exposure that caused them for example cancer. In a recent summary of what it was doing on the top ten priorities,

Slide –

solar radiation and

tobacco smoke and

radon were being dealt with conveniently by other departments,

work around **asbestos** was spelled out in detail. HSE then started to propose ways of controlling and eliminating exposures particularly on

silica (also a little on **welding fumes**). Respiratory crystalline silica is an extremely widespread component of stone, concrete, brick and other building materials.

pause

But then we get apologies for inaction.

There's no time to go into this in detail but take the description of work on diesel exhaust fumes.

HSE gives the number of people exposed at work at 10,000 and refers to evidence that for some of the components of diesel fume the evidence for carcinogenicity has led to classification as 2A not 1.

But in HSE's own analysis of the burden uses 2M ever-exposed and it is likely to be much larger with over half a million employed in driving jobs at any time. The HSE's response which it recognises must improve compliance is to depend on guidance that it has produced, rather on the full battery of requirements for employers whose employees are exposed to carcinogens (exposure monitoring, health surveillance, measures for elimination, etc).

Public domain..

Cluster of cases with azo dyes, crack detections (engineering) – developer, comes out of the crack – bladder cancer patients exposed – hse responded very well, guidance to minimise – sheffield based company looked around for alternatives, collect examples of those exposed – and publicise, to call for change.

Workers untied can do amazing things...stopped tolerate it, compensated – vibration.- dust exposures – trade unions acting together – claims – 500,000 deafness. Force the issue.

Pause

These numbers arguments can seem tiresome **but** they are important – not because we can ever be sure how many people will get cancer through their jobs but because they set the importance HSE gives to work.

If 10,000 was the right level of people exposed to diesel fumes then there would be no one here today exposed to diesel at work – Simon doesn't believe it. And think what happens if you include exposure during travel to work !!

It's important for another reason. HSE believes in cost-benefit analysis for setting acceptable levels of exposure. It's using the guesses it makes on numbers exposed to work out how much is worth spending on reaching higher levels of protection – small numbers mean poor protection. The trade unions should be complaining loudly about this.

Pause

What can you do ?

What we did in Sheffield was to interview patients with bladder cancer about their jobs. We found 10% had been exposed to dyes at work in crack detection in engineering/steel. The dyes had not previously been recognised as potential causes of bladder cancer but HSE subsequently showed some interest and put out advice to employers on substituting or reducing exposure to the dyes at work.

What can we learn from this ?

This was a previously unrecognised cause of bladder cancer in the engineering industry – all had previously been put down to mineral oil exposure. Yet we know that rust-proofing coatings and solvents also expose engineering workers to risk of bladder cancer. It looks as though there are universal risks and highly specific risks in the engineering industry and the latter have been ignored. You need to look to make sure that you really know what's going on in your trade or industry.

- Contact workers to build up an inventory of processes used in your industry. Use a checklist to make sure that any exposures that may have occurred in the past are tracked down.
- Use local internet forums to share knowledge of what went on in local factories
- Contact local specialists, hospital social workers, Macmillan nurses, patients' groups to ask to interview patients about their work exposure. Start with lung cancer patients (there's a compensation scheme if they were exposed to coke oven fumes), nasal cancer, leukaemia and bladder cancer are all worth investigating.
- Work with Trade Union and other personal injury solicitors to investigate cases that are reported to them.

Use databases to find relevant research as members in many unions have already done. (e.g. surveyors in PCS)

Transition – adjust engines, newer diesel – electricity:

We need nothing less than a trade union enquiry into carcinogens at work.